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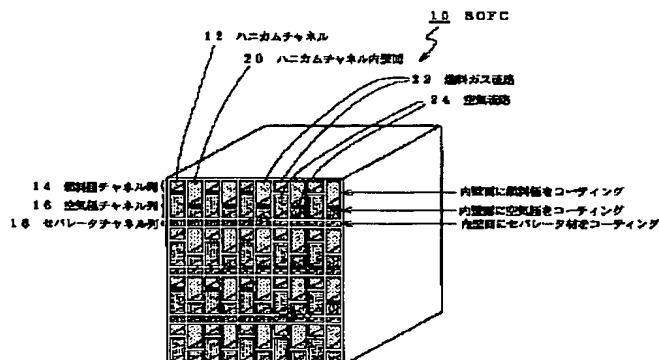
APPLICATION NUMBER : 10102935

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INVENTOR : KAWAI MASAYUKI;

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TITLE : SOLID ELECTROLYTE TYPE FUEL CELL OF HONEYCOMB INTEGRATED STRUCTURE



ABSTRACT : PROBLEM TO BE SOLVED: To increase an effective area of a cell, and to enhance power generation performance by making uneven a surface operated as a fuel cell.

SOLUTION: A honeycomb structure arranged vertically and laterally in a matrix form with many cross-sectionally polygonal honeycomb channels 12, 12, etc., is formed integrally out of a solid electrolyte material, fuel electrode channel rows 14, 14, etc., with fuel electrodes, air electrode channel rows 16, 16, etc., with air electrodes, separator, channel rows 18, 18, etc., with separators are formed in order into layered structure in inner wall faces of the honeycomb channels 12, 12, etc. The cross-sectional shapes of the fuel electrode channels 14, 14, etc., and the air electrode channels 16, 16, etc., are made to be combined alternately with large one and small one in their layered direction respectively, and boundary faces, operated as cells, between the respective fuel electrode channels 14, 14, etc., and the respective air electrode channels 16, 16, etc., are formed into ruggedness rectangular planar shapes.

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